

REMARKS/ARGUMENTS

The claims are 2-5, 7-9 and 25. Claims 6, 10, 13-21 and 23-24 are canceled by this Amendment. New claim 25 has been added as a sole independent claim and, accordingly, claims 2-5 and 7-9 have been amended to depend on new claim 25 and to conform to new claim 25. Support for the claims may be found, inter alia, in the disclosure at Page 1, last paragraph to Page 2, second paragraph, Page 3, lines 13-20, Page 4, first paragraph, Page 6, second and third paragraph, and in the drawings. Reconsideration is expressly requested.

Applicants wish to thank the Examiner for the courtesy of an interview with Applicants' undersigned attorney and one of the inventors, Ms. Jean Marie Field, on June 6, 2003, the substance of which is set forth herein. The Examiner had rejected the claims on the basis of *Freeman et al.* U.S. Patent No. 5,931,764 or *Rappaport* U.S. Patent No. 4,779,249 under 35 U.S.C. §103(a) and had also rejected the claims under 35 U.S.C. §103(a) as being unpatentable over *Radley-Smith* U.S. Patent No. 6,216,490 in view of *Rappaport*. Essentially, the Examiner's position was that each of these references discloses a snag-free wristwatch as recited in the claims and that the terms "snag free", "flowing contours" and "substantially smooth to the touch" are relative terms that

are given their broadest reasonable meaning within the context of the claims, absent specific narrowing limitations in the claims. In response, Applicants submitted to the Examiner a proposed new independent claim 25 which eliminated the relative terms "snag free", "smooth" and "flowing" and which added structural features to further define the invention over the prior art. The proposed new independent claim 25 and the prior art were discussed at the interview. The new claim 25 uses, in part, universally accepted detailed definitions from Webster's Dictionary to specifically define the structure of Applicants' invention. Although the Examiner stated at that time that the Amendment would not place the case in condition for allowance, the Examiner indicated that he would reconsider this position upon filing a formal response and, accordingly, reconsideration is expressly requested for the following reasons.

As set forth in new independent claim 25, Applicants' invention provides a safety wristwatch system that is designed to prevent injuries to persons other than the wearer. As shown in the drawings, for example FIGS. 4 and 5, which are cross-sectional views taken across planes A-A' and B-B' of FIG. 3, Applicants' system is free of protruding elements and external stems, the watch has an even surface devoid of roughness and projections, the pressure sensitive devices are below the surface

of the watch, the band meets the surface of the watch with a flush joint, and the watch, the pressure sensitive device and the band are without abrupt changes in width and thickness and have even continuous surfaces relative to themselves and each other. All of these features are designed to prevent injuries and infection upon contact with persons other than the wearer.

Such injuries are a real problem that exists currently from contacts with watches. According to the U.S. Centers for Disease Control and Prevention, each year more than 2 million persons contract infections as a result of hospital care. Associated costs were \$4.5 billion in 1992 and presumably are much more now. Among these infections, staph bacteria are the number one cause and present very difficult problems, with increasing incidents and strains resistant to drugs, and sometimes fatal outcomes. Staph is among the most common bacteria, and infection occurs when the integrity of the skin barrier is broken, e.g., through surgical procedures, injuries (including scratches and scrapes). Immune-compromised persons are among the most vulnerable--newborns, certain diabetics, etc., and studies have shown that dialysis patients may have as high as a 1 in 25 chance of contracting a staph infection over a one-year period. An estimated 10 million patients are at risk in the U.S. annually for contracting a staph infection. Skin breaks and tears can be a serious problem for those at risk.

Any improvement which would avoid or reduce the possibility of skin breaks and tears on these persons, on infants, those in hospitals and nursing homes, the elderly and those in home-care, will be a great improvement and highly beneficial to society. Applicants' safety wristwatch, if worn by the caregivers helping these people (instead of ordinary wristwatches which frequently have sharp edges and are bulky and likely to injure), would represent such an improvement.

None of the cited prior art is concerned with the problem which Applicants' invention solves: of preventing injuries to persons other than the wearers, and the systems they show are entirely unsuitable for that purpose. Moreover, none of *Freeman et al.*, *Rappaport* or *Radley-Smith* have the structure recited in claim 25 or provides the means for preventing injuries to persons other than the wearer.

Freeman et al. shows a device that has numerous protruding elements and projections and abrupt changes in thickness, and contains no hint of a safety wristwatch system "free of protruding elements...having an even surface devoid of roughness and projections...a flush joint for retaining said watch on a limb of a wearer...band without abrupt changes in width and thickness and having even continuous surfaces relative to

themselves and each other...". The three closures described in *Freeman et al.* are all potentially highly dangerous. As shown in the drawings, the device has sharp protruding hooks (buckle rails 24) to engage the strap, and the strap when closed must extend beyond the hooks to form an abrupt double strap thickness. The alternatives include (1) a conventional buckle (Col. 2, line 38) which would have a protruding pin and an abrupt change to a double band thickness, and (2) Velcro--having a non-flush joint with a double band thickness (two thicknesses of band plus Velcro) and in most cases, a rough surface of exposed Velcro. The polymer edging of *Freeman* as well presents an abrupt change in thickness and a surface that could harm a person other than the wearer.

Thus, *Freeman's* wearable multi-function device with a built-in display is entirely unsuitable as a safety wristwatch system that protects against injury to persons other than the wearer. *Freeman's* device is necessarily large and bulky because its functions include pedometric and physiological monitoring for joggers, smart card applications, health care information, cellular messaging services, and so on. The device includes input keys and may include a speaker and a microphone. *Freeman's* FIG. 6 shows his display element having six lines of text, and the display needs to be large enough to show medication and

medical condition information (Col. 5, line 1), animation sequences...a video clip or slide show (Col. 4, lines 12-15), and stereoscopic effects (Col. 5, lines 51-52). The display is so large that in order to be incorporated in a wearable and flexible device without damage the display itself must be made flexible (Col. 1, lines 15-20 and claim 1). Given that virtually all wristwatches use rigid display elements, the need for a flexible display in *Freeman* is a further indication of the large size of the device.

In fact, *Freeman* uses polymer edging 20 to "add comfort to a wearer" (Col. 3, lines 8-10) because the device is so large and bulky that users would find it uncomfortable to wear if the edging was not provided. FIG. 1 of *Freeman* further shows a device of relatively large width compared to its length, and section views 2A and 2B show a device which is large, bulky and certainly not conducive to safety.

Bulkiness is unacceptable in Applicants' safety wristwatch system as recited in claim 25 because a bulky wristwatch worn by a person closely "brushing by" is likely to strike and injure a person while a wristwatch without abrupt changes in width and thickness would not. Similarly, a bulky device presents a larger

potential impact surface more likely to contact others and cause harm.

Rappaport provides an inexpensive disposable wristwatch having at least one sealed chamber containing the watchworks and other sealed chambers which may contain decorative or promotional elements. Rather than a band "without abrupt changes in...thickness and having even continuous surfaces relative to themselves and to each other", as recited in Applicants' claim 25, as shown by his FIGS. 1-4, *Rappaport* has sudden and abrupt changes in thickness and discontinuities as in the notches between the chambers in FIG. 4 (as well as relatively sharp edges and corners which clearly represent protrusions). In addition, the outside edges of the perimetric welds of *Rappaport* may present particularly hard edges to persons whom they might contact. *Rappaport* also uses a Velcro catch, with all of its potentials for snagging including abrupt changes in thickness, roughness and discontinuities, to join the ends of the strap together.

Radley-Smith shows a wristwatch in which the display region is extended from the watchface to the bracelet itself, by use of a liquid crystal or LED (Light Emitting Diode) elements either individually housed in series of adjacent cases (Col. 3, lines

14-27) as in, for example, FIGS. 1 and 2, or in a single display unit extending along the bracelet (Col. 4, line 41), as in, for example, FIG. 3.

For example, FIGS. 3, 5 and 6, which the Examiner has pointed to, show embodiments using a rigid bracelet which reflects Radley-Smith's need to provide solid foundations for the liquid crystal and LED elements, to avoid flexing which could cause them to malfunction and break. Rigid bracelets which would not be snag-free pose a risk to those other than the wearer with whom the watch comes in contact. When passing in sliding motions parallel to the axis of the wrist of the wearer, a rigid bracelet would, upon contact with another person, cant and cock and its hard edges would tend to injure. The opening in the "cuff" type rigid bracelet would also tend to catch and injure. The tang illustrated as "conventional catch 17" on FIG. 6 and used in the hinge and clasp arrangements (Col. 5, line 40) shown on Radley-Smith's rigid bracelets in FIGS. 5, 6 and 14 is clearly a protruding element, likely to snag.

The remaining embodiments disclosed in Radley-Smith that were not relied on by the Examiner likewise show systems that have external stems and protruding elements, many sharp elements and abrupt changes in width and thickness, as in the meetings of

the watch faces and bracelets, and the watch case to strap joints and use of conventional buckle in FIG. 15. See also FIGS. 13, 14 and 16. Radley-Smith's FIGS. 11 and 12 show a fabric wrap-around strap which carries a sequence of adjacent display elements and is provided with a hook and loop (Velcro) fastening. The extreme width of the strap to accommodate the closures would increase the likelihood of contact with persons other than the wearer. The high and irregular display elements protrude and present abrupt changes in thickness, and non-continuous surfaces relative to themselves and each other. Similarly, the Velcro closures present rough surfaces (exposed Velcro), discontinuities, changes in thickness (double layers), etc...

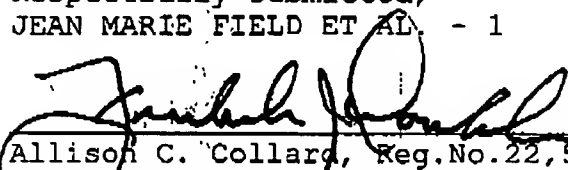
Thus, none of the cited prior art alone, or in combination, show a safety wristwatch system or even recognize the problem of preventing harm to persons other than the wearer which Applicants' invention is directed to. Accordingly, it is respectfully submitted that none of the prior art discloses or suggests Applicants' claimed invention as recited in claim 25.

In summary, new claim 25 has been added, claims 2-5 and 7-9 have been amended, and claims 6, 10, 13-21 and 23-24 have been canceled. In view of the foregoing, withdrawal of the final

action and allowance of this application are respectfully requested.

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